

APR 23 2004  
OFFICIAL

DOCKET: CU-2845

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Atsushi HAYAKAWA et al. )  
SERIAL NO: 10/074,359 ) Group Art Unit: 1744  
FILED: February 12, 2002 ) Examiner: Sean E. Conley  
TITLE: METHOD OF STERILIZATION FOR CONTAINER, APPARATUS  
USING THEREFOR, AND HEAT TREATMENT FOR CONTAINER

AMENDED CLAIMS

1. (currently amended) A method for sterilizing a container bottle , comprising the following steps of a) through d), in that order:
  - a) preheating the entire bottle and additionally preheating a neck portion of the bottle;
  - b) supplying a disinfectant mist into a container inside the bottle;
  - c) heating the container bottle into which the disinfectant mist has been supplied, while discharging the mist from the container bottle; and
  - d) rinsing an inside of the container after discharge of the the inside of the bottle after discharging the disinfectant mist therefrom.
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (currently amended) The method as claimed in claim 1, further comprising the step of providing a prescribed leaving time after supplying the disinfectant mist, before starting to discharge the mist from the container bottle.

6. (currently amended) The method as claimed in claim 1, further comprising the step of providing a prescribed standing time after discharging the mist, before starting to rinse the inside of the ~~container~~ bottle.

7. (currently amended) The method as claimed in claim 1, wherein a hot blast is supplied into the ~~container~~ bottle into which the mist has been supplied so as to carry out the heating of the container and the discharging of the mist.

8. (currently amended) The method as claimed in claim 1, wherein: the step of rinsing the inside of the ~~container~~ bottle comprises supplying a rinsing fluid heated into the container.

9. (withdrawn) An apparatus for sterilizing a container, comprising:  
a device for supplying a disinfectant mist into a container;  
a device for heating the container into which the mist has been supplied;  
a device for discharging the mist from the container; and  
a device for rinsing an inside of the container from which the mist has been discharged.

10. (withdrawn) The apparatus as claimed in claim 9, further comprising a device for preheating the container prior to supply of the mist.

11. (withdrawn) The apparatus as claimed in claim 9, wherein: said device for preheating the container comprises a device for heating entirety of the container by a hot blast which is supplied into the container, and a device for heating a mouth portion of the container from an outside thereof.

12. (withdrawn) The apparatus as claimed in claim 9, wherein: said device for rinsing the container comprises a device for supplying a rinsing fluid heated into the container.

13. (withdrawn) An apparatus for sterilizing a container, comprising:  
a device for supplying a disinfectant mist into a container;  
a device for supplying a hot blast into the container into which the mist has been supplied; and  
a device for rinsing an inside of the container.

14. (withdrawn) The apparatus as claimed in claim 13, further comprising a device for preheating the container prior to supply of the mist.

15. (withdrawn) The apparatus as claimed in claim 14, wherein: said device for preheating the container comprises a device for heating entirety of the container by a hot blast which is supplied in the container, and a device for heating a mouth portion of the container.

16. (withdrawn) The apparatus as claimed in claim 13, wherein: said device for rinsing the container comprises a device for supplying a rinsing fluid heated into the container.

17. (cancelled)

18. (new) The method as claimed in claim 1 wherein the preheating of the bottle is carried out by a hot blast to the entire bottle including the neck portion.